

Protect Your Processes, Production & Critical Equipment – Reduce Your Liability.

Minimize risk from hard water with new patent pending failsafe water softener technology from Industrial Water Solutions.

ZERO HARDNESS HIGH EFFICIENCY TWIN & TRIPLE TANK SOFTENER SYSTEMS

Our 'ZH' Zero Hardness Failsafe water softeners reduce chance of failure and hardness leakage by always having two softener tanks online in series and eliminating stagnant water in offline tanks and piping.

- Worker polisher tanks running in series eliminate hard water caused by one softener not functioning or failing to regenerate correctly.
- Piping and valving optimization minimizes dead legs and hardness leaching into the water.
- Lower hardness leakage & salt savings are achieved by running the softeners in a double pass worker polisher softener flow configuration.
- Hardness leakage and high efficiency are optimized with adjustable salt level settings.

STANDARD FEATURES

- Failsafe, high efficiency design
- 100% soft water uptime configuration
- Anti-fouling, high flow resin
- Distribution and controls to reduce hardness leakage
- Bi-directional flow with continuous soft water polishing
- Skid Mounted, pre-piped and pre-wired
- Parallel mode for peak flow rates
- Factory hydro-tested at 100 psig
- Systems are all NSF 61 rated

INSTRUMENTATION / CONTROLS

- Butterfly valves with air or electric actuators
- AB 1400 PLC with BMS communication
- 304 stainless steel piping and distribution
- Metered regeneration with timed override
- Inlet/Outlet pressure gauges & sample ports
- Adjustable brining settings from 4 15 lbs



OPERATING PARAMETERS

- Inlet pressure: 30 100 psig
- Electrical" 120 240 VAC, 50 60 Hz
- Temperature: 35 110 °F

OPTIONS

- Regeneration failure early detection system
- Low flow hardness elimination system
- Triple stage pressure transducer arrangement
- Premium online hardness monitor with 4-20 output
- High pressure and temperature systems
- ASME code and stamped resin tanks
- 304 and 316 Stainless steel tank construction
- Additional piping materials, including CPVC
- Fully integrated sanitization system
- Seismic zone rated tanks and systems
- Ultraviolet light and Cartridge filter system



ZERO HARDNESS HIGH EFFICIENCY TWIN & TRIPLE TANK SOFTENER SYSTEMS

	EXCHANGE CAPACITY/(Grains)		FLOW RATES			PIPE SIZE			TANK SIZES		SALT
CATALOG NUMBER	SALT DOSAG SALT USAGE		SERV		BACKWASH	SERVICE	DRAIN	RESIN	SOFTENER	BRINE	STORAGE
Nomber	MAX.	MIN.	CONT. GPM	PEAK GPM	GPM	IN.	IN.	CU. FT.	IN.	IN.	LBS
ZH-150-1	450,000/	400,000/	21	64		1	1				
1-1/4	150,000/ 75/	100,000/ 30/	28	86	10	1-1/4	1	5	20 x 54	24 x 50	700
1-1/2	75	30	36	110		1-1/2	1	-			
2			46	138		2	1				
ZH-210-1-1/4 1-1/2	210,000/	140,000/	27 42	82 128		1-1/4 1-1/2	1	_			200
2	105/	42/	53	160	15	2	1	7	24 x 54	24 x 50	600
2-1/2	105	42	76	230	1	2-1/2	1				
ZH-300-1-1/2	300,000/	200,000/	45	136		1-1/2	1				
2 2-1/2	150/	60/	61 92	184 280	20	2 2-1/2	1	10	30 x 54	24 x 60	600
3	150	60	109	330	-	3	1				
ZH-450-1-1/2	450,000/	000 000/	42	126		1-1/2	1				
2	450,000/ 225/	300,000/ 90/	54	164	20	2	1	15	30 x 60	30 x 60	1000
2-1/2	225	90/	79	240] -~	2-1/2	1	10	00 x 00	00 X 00	1000
3			92	280		3	1				
ZH-600-1-1/2 2	600,000/ 300/	400,000/ 120/	48 73	144 220		1-1/2 2	1-1/2 1-1/2				
2-1/2	300/	120/	92	280	30	2-1/2	1-1/2	20	36 x 60	39 x 60	1900
3			116	350	1	3	1-1/2				
ZH-750-2	750,000	500,000/	59	180		2	1-1/2				
2-1/2	375/	150/	92	280	30	2-1/2	1-1/2	25	36 x 72	39 x 60	1700
3	375	150	106	320		3	1-1/2				
ZH-900-2	900,000	600,000/	69	210		2	2				
2-1/2	450/	180/	99	300	45	2-1/2	2	30	42 x 60	42 x 60	1900
3	375	180	124	376		3	2				
ZH-1050-2	1,050,000/	700,000/	63	190		2	2				
2-1/2	525/	210/	96	300	45	2-1/2	2	35	42 x 72	50 x 60	2300
3	525	210	124	346		3	2				
ZH-1200-2-1/2	1,200,000/	800,000/	106	320		2-1/2	2				
3	600/	240/	142 205	430	60	3 4	2 2	40	48 x 60	52 x 60	2600
4 ZH-1500-2-1/2	600 1,500,000/	240 1.000.000/	109	620 330		2-1/2	2				
3	750/	300/	149	450	80	3	2	50	54 x 60	66 x 46	3300
4	750	300	267	620	1 00	4	2	30	J4 X 00	00 X 40	3300
ZH-1950-2-1/2	1,950,000/	1,300,000/	111	336		2-1/2	2-1/2				
3	975/	390/	155 294	470	100	3	2-1/2	65	60 x 60	60 x 66	4000
4	975	390		890		4	2-1/2 3				
ZH-2400-3 4	2,400,000/ 1,200/	1,600,000/ 480/	162 317	490 960	120	3 4	3	80	66 x 72	66 x 72	5800
6	1,200	480	429	1300	120	6	3	. 00	00 X 12	00 X 72	3000
ZH-3000-3	3,000,000/	2,000,000/	168	510		3	3				
4	1,500/	600/	330	1000	140	4	3	100	72 x 72	82 x 60	7300
6	1,500	600	462	1400		6	3				
ZH-3600-4 6	3,600,000 1,800/	2,400,000/ 720/	343 495	1040 1500	105	6	3	100	70 15 70	92 5: 00	6000
8	1,800/	720/ 720	627	1900	. 165	8	3	120	78 x 72	82 x 60	6000
ZH-4200-4	4,200,000	2,800,000/	356	1080		4	3				
6	2,100/	840/	515	1560	190	6	3	140	84 x 72	90 x 60	7500
8	2,100	840	660	2000		8	3				
ZH-4800-4	4,800,000/	3,200,000/	396	1200		4	4	400	00 : 70	00.00	0500
<u>6</u> 8	2,400/ 2,400	960/ 960	528 700	1600 2120	220	6 8	4	160	90 x 72	90 x 60	6500
ZH-5400-4	5,400,000/	3,600,000/	446	1350		4	4				
6	2,700/	1,080/	581	1760	250	6	4	180	96 x 72	96 x 60	7700
8	2,700	1,080	769	2300		8	4				

Non-chemical and chemical water treatment systems can be packaged with the ZH Water Softener System to optimize water purity and chemistry for your organization. Consulting for current and planned water treatment systems and services are also available.

NON-CHEMICAL AUXILIARY WATER TREATMENT SYSTEMS

- RO & Nanofiltration Systems
- IX/EDI Deionization Systems
- Backwashable Filter Systems
- Ultrafilter (UF) Systems
- Microfiltration Systems

CHEMICAL AUXILIARY WATER TREATMENT SYSTEMS

- Mixed Oxidant Generation Systems
- Chlorine Dioxide Generation Systems
- Chlorine Injection Systems
- Monochloramine Injection Systems
- Advanced Oxidation Process Systems

